

FIG. 1

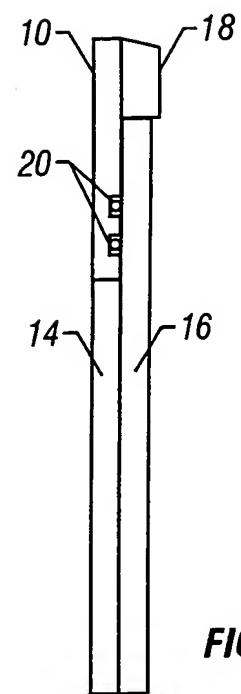


FIG. 2

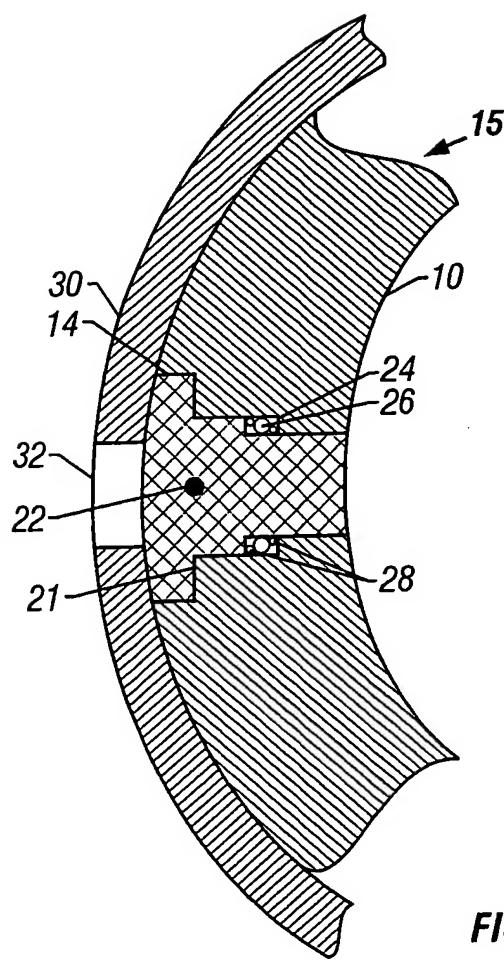
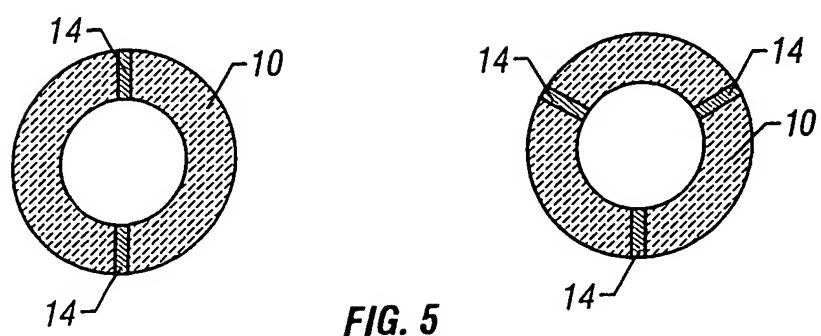
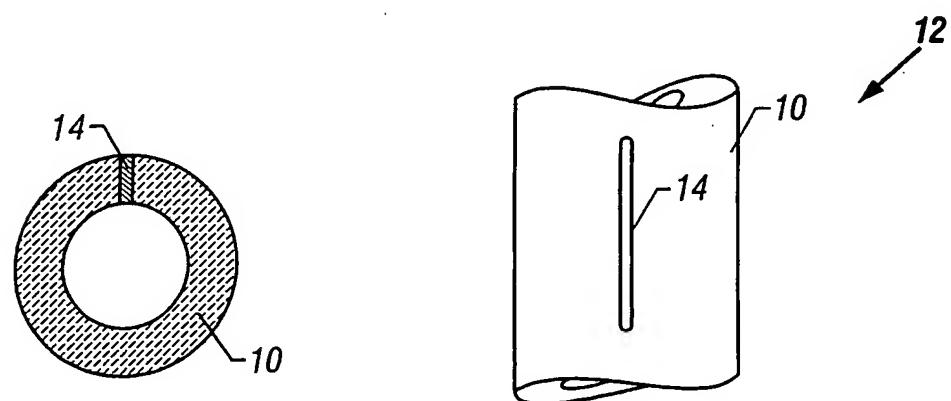
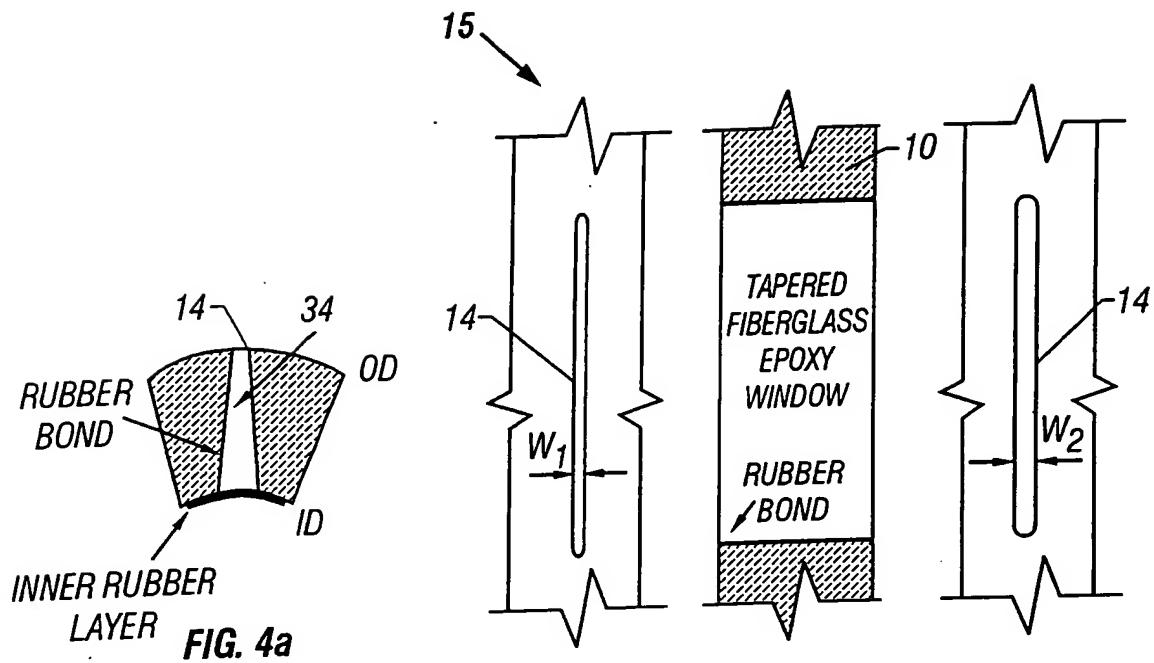


FIG. 3



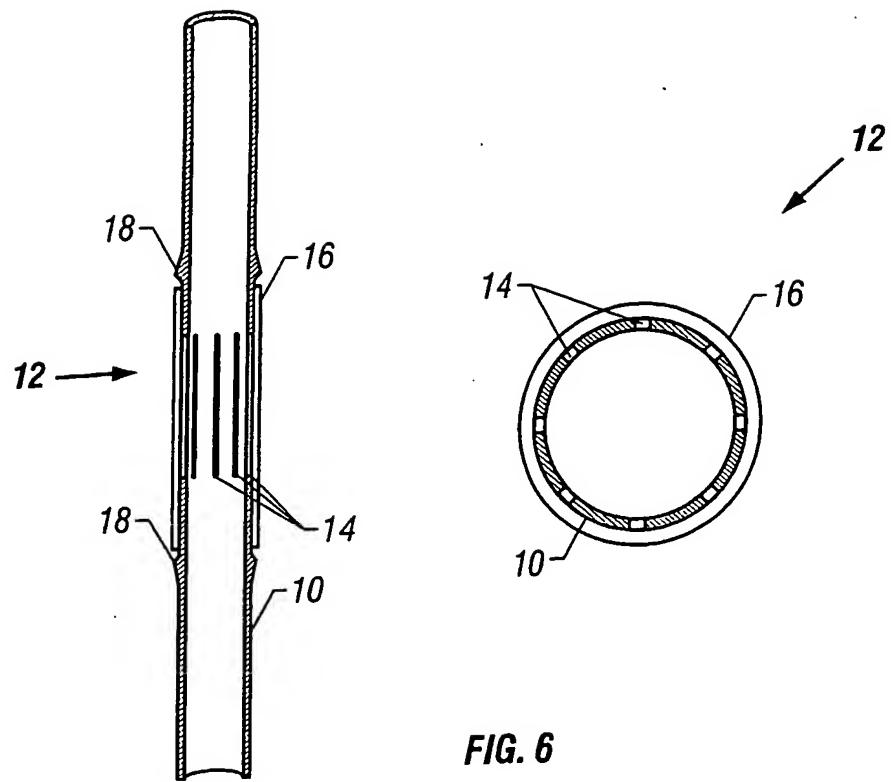


FIG. 6

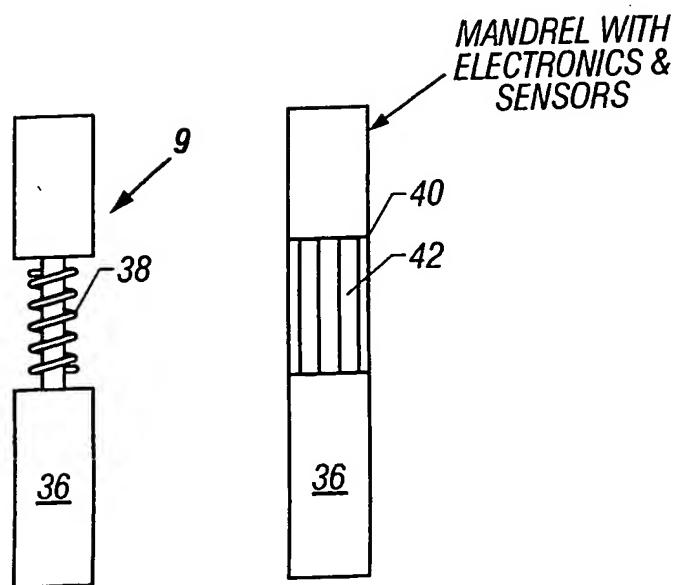


FIG. 7a

FIG. 7b

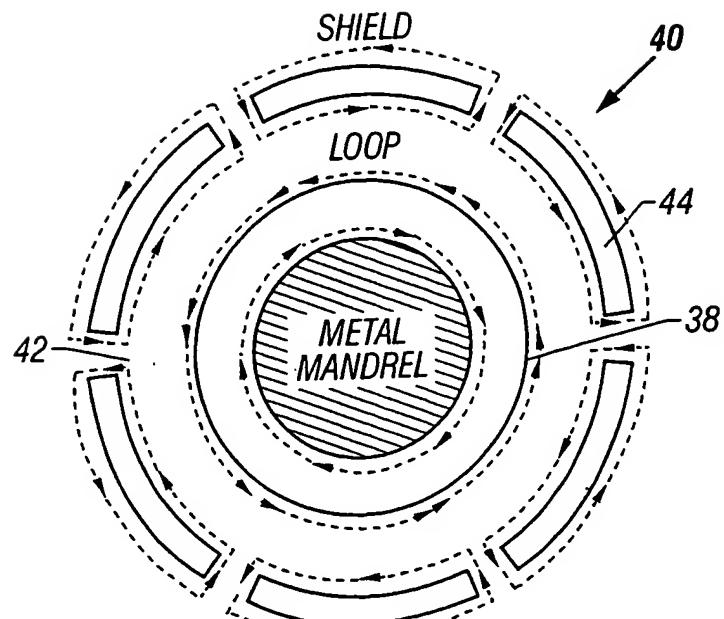


FIG. 8

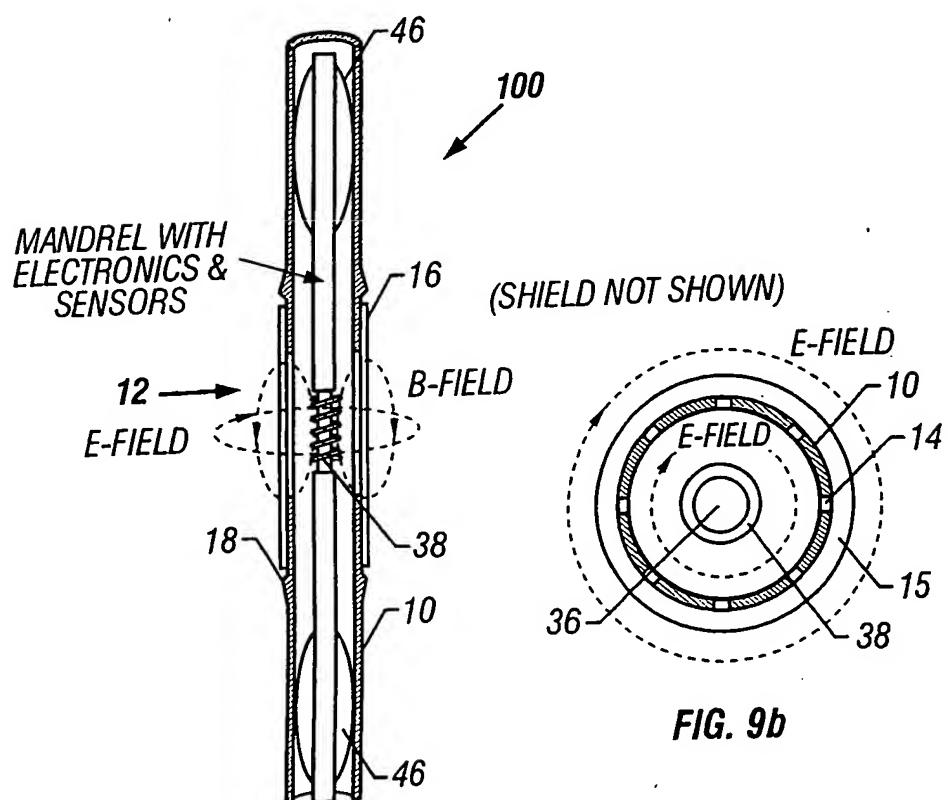


FIG. 9b

FIG. 9a

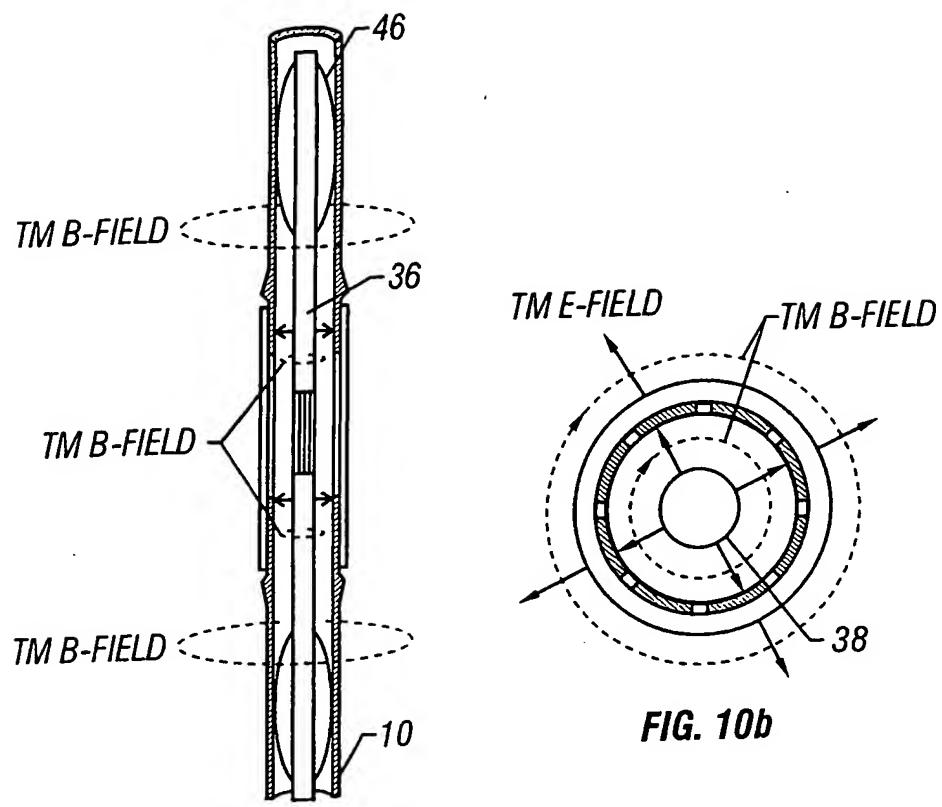


FIG. 10a

FIG. 10b

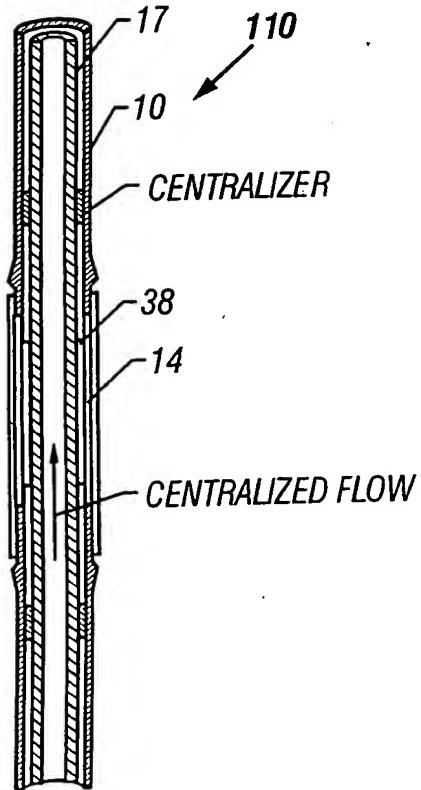


FIG. 11

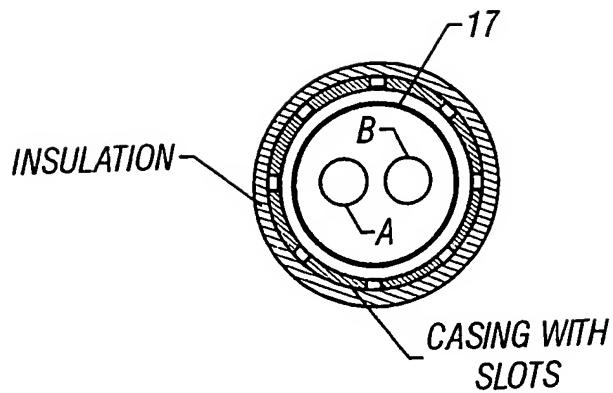
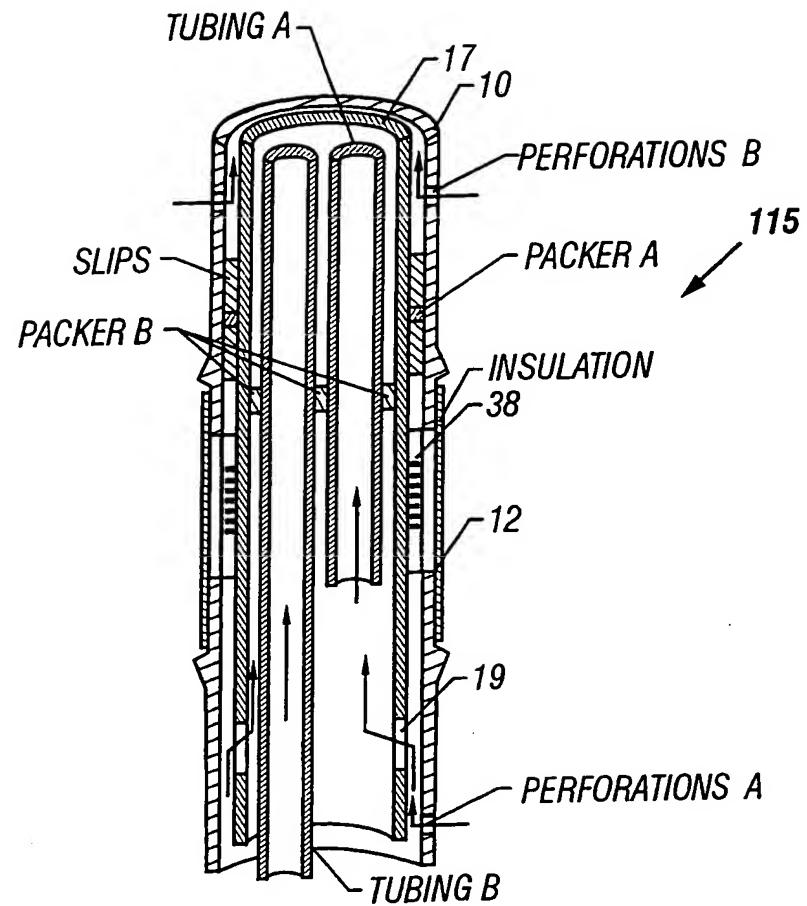


FIG.12

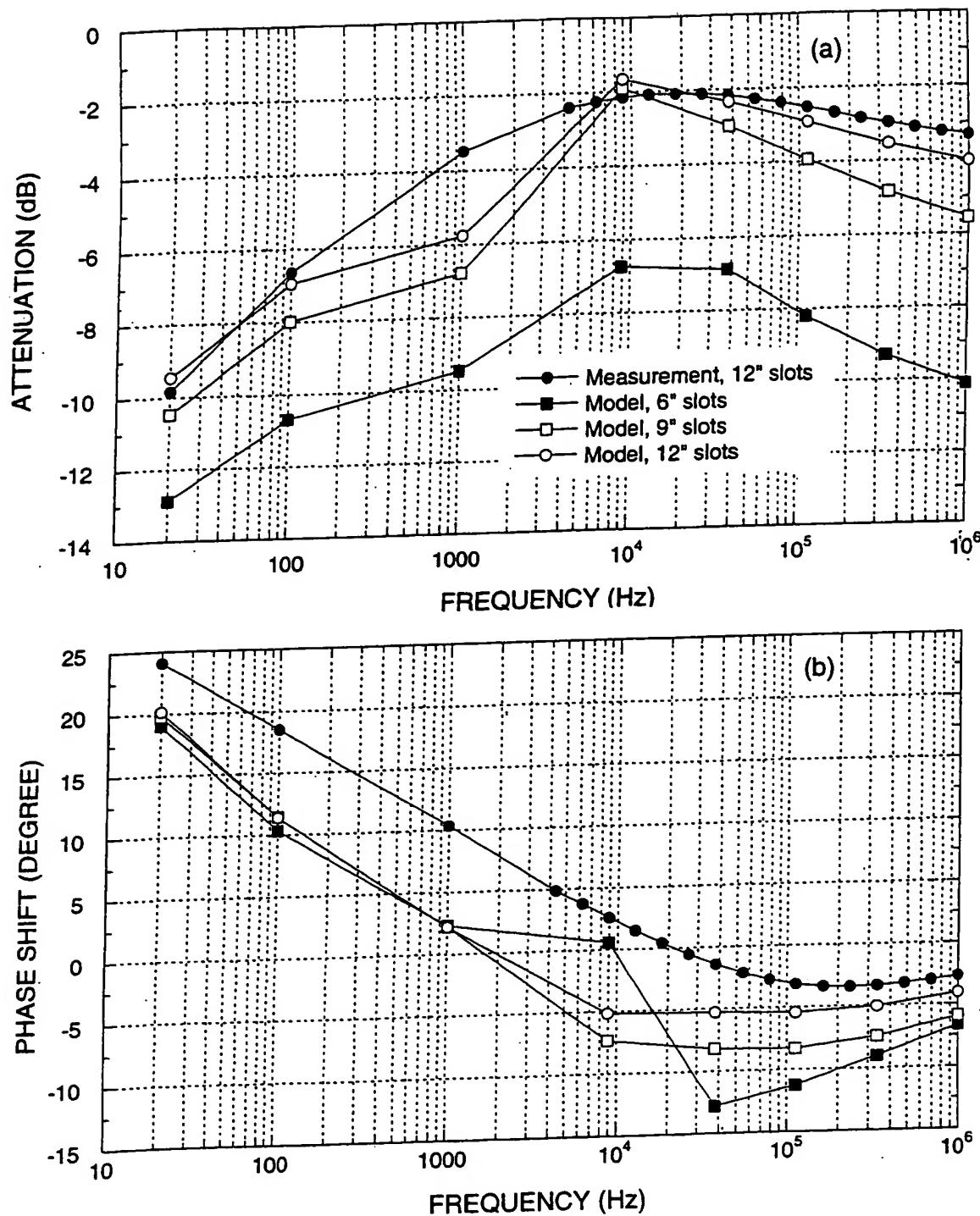


FIG. 13

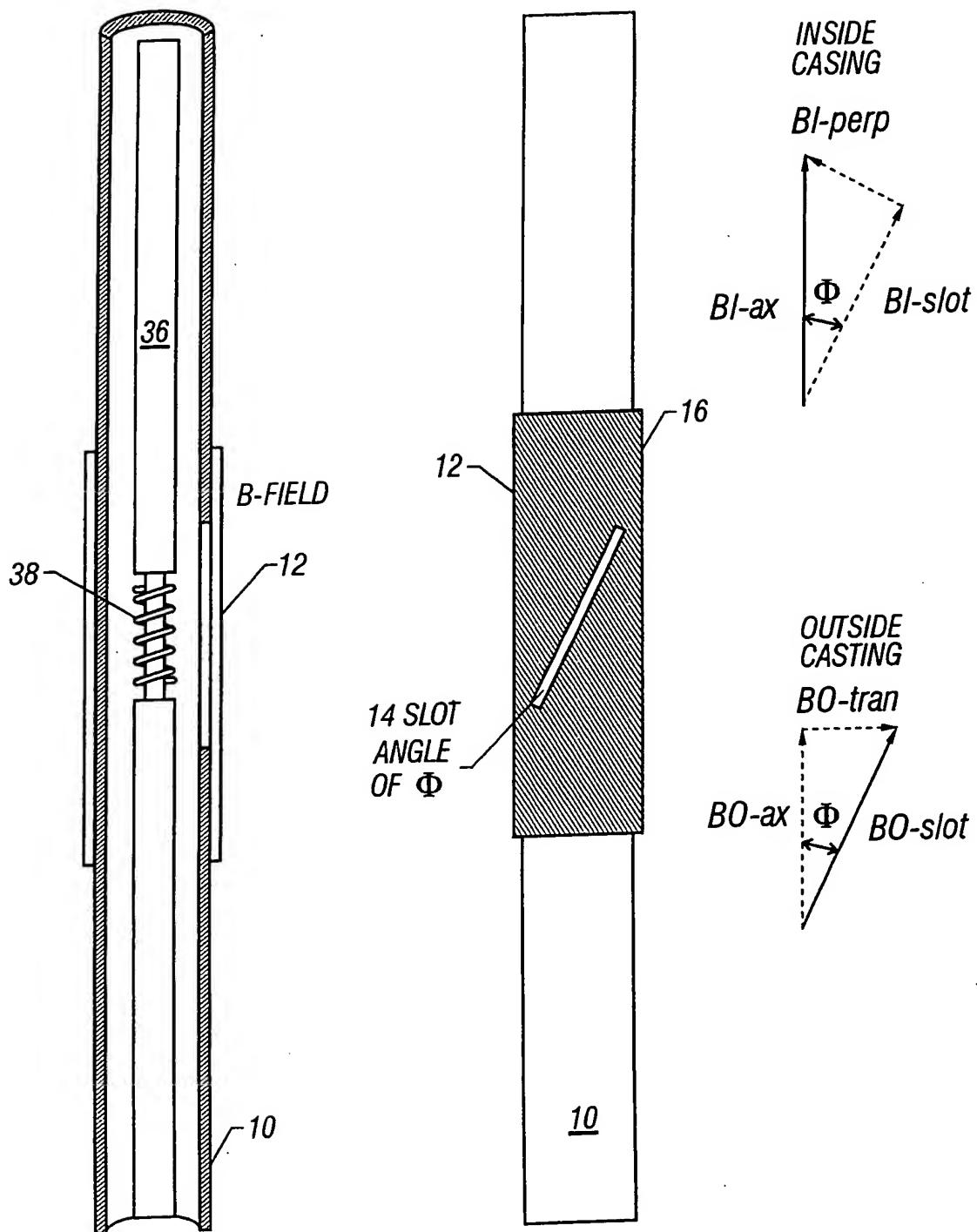


FIG. 14

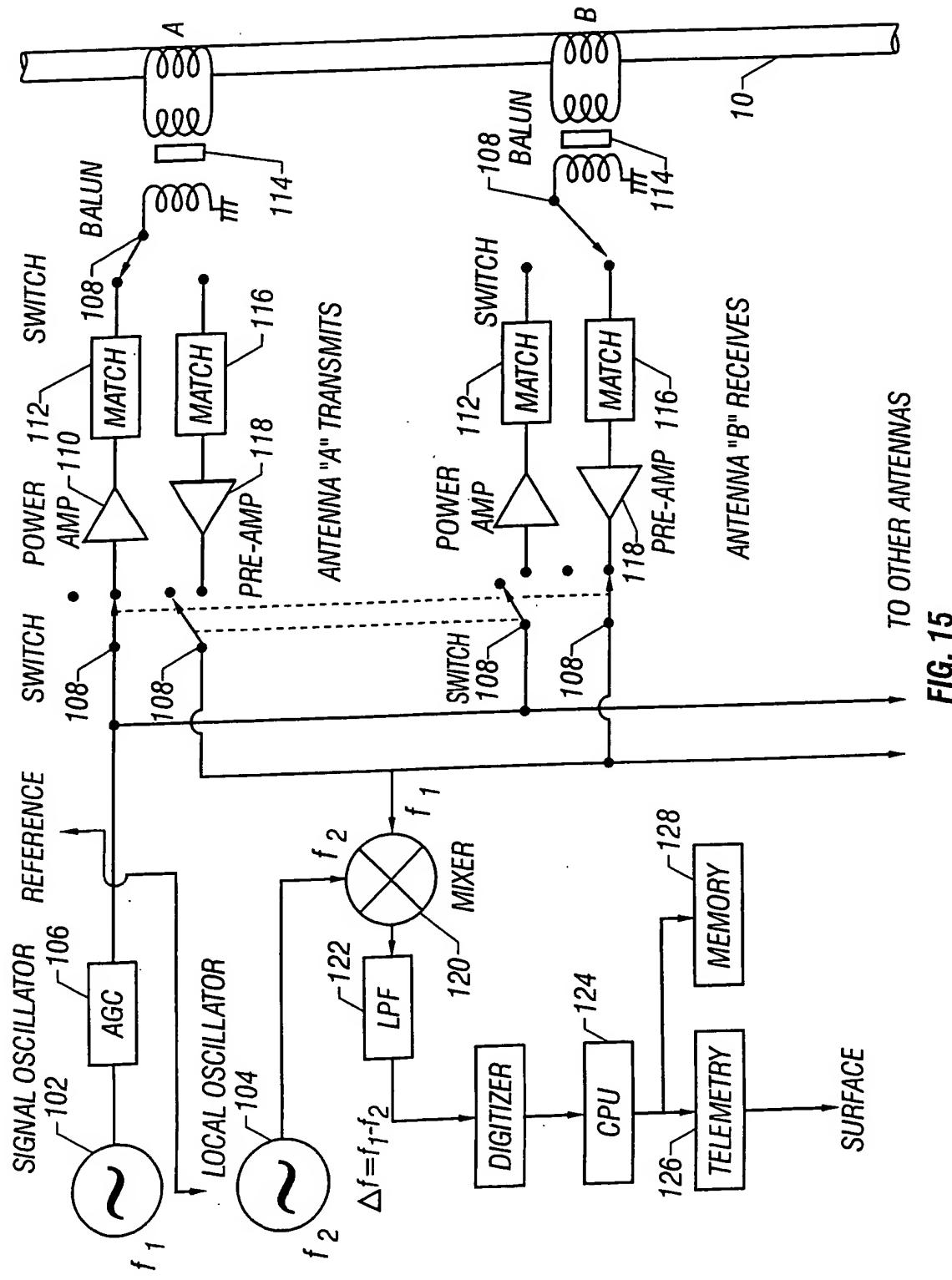


FIG. 15

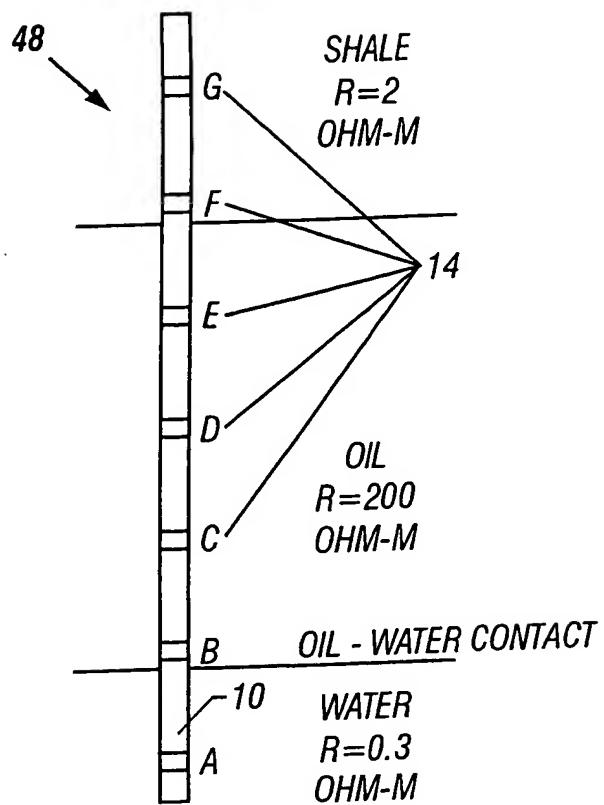


FIG. 16

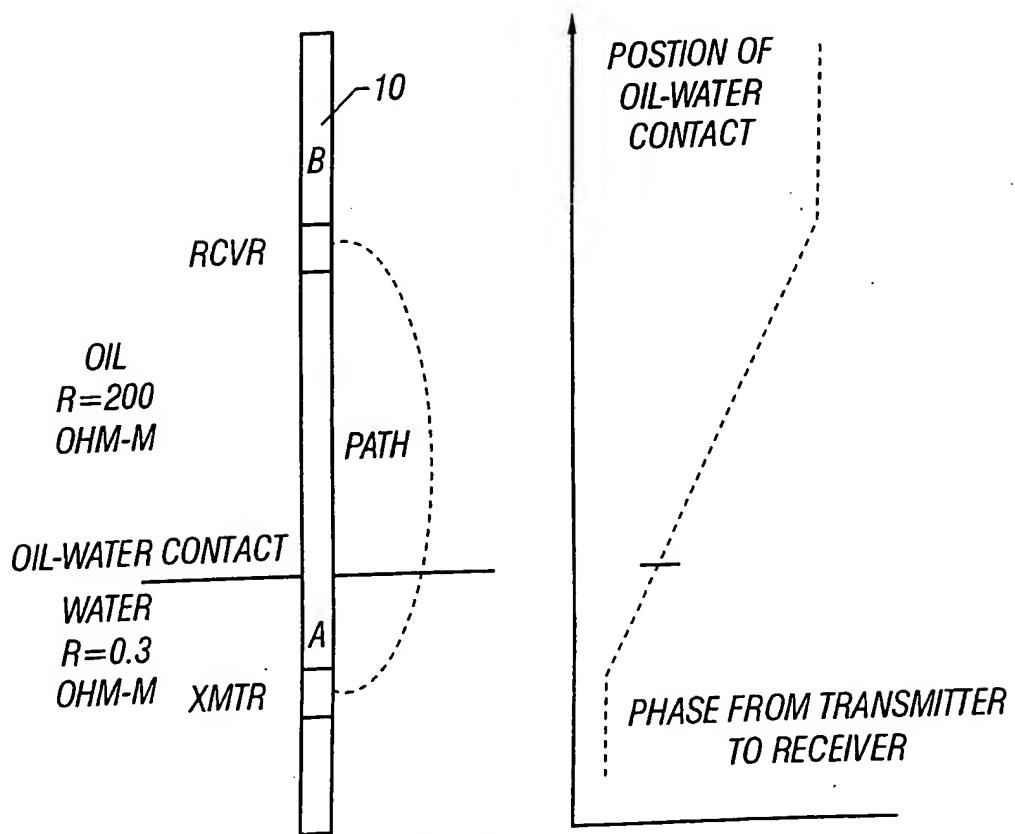


FIG. 17

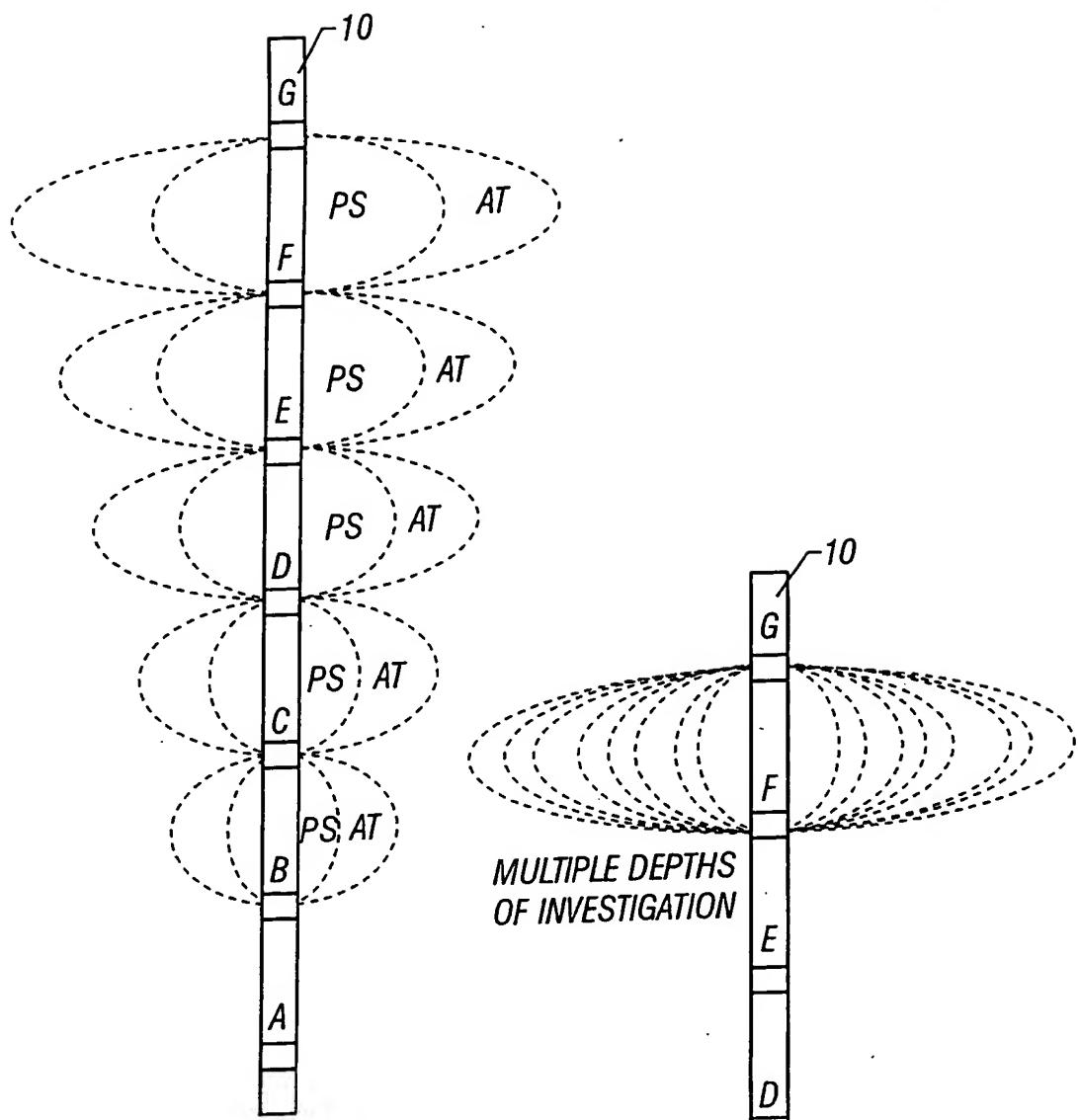


FIG. 18

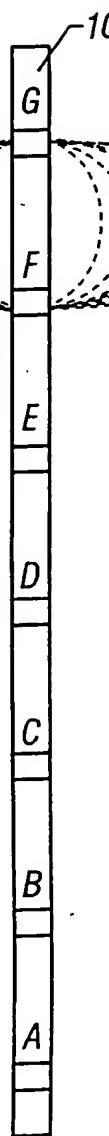


FIG. 19

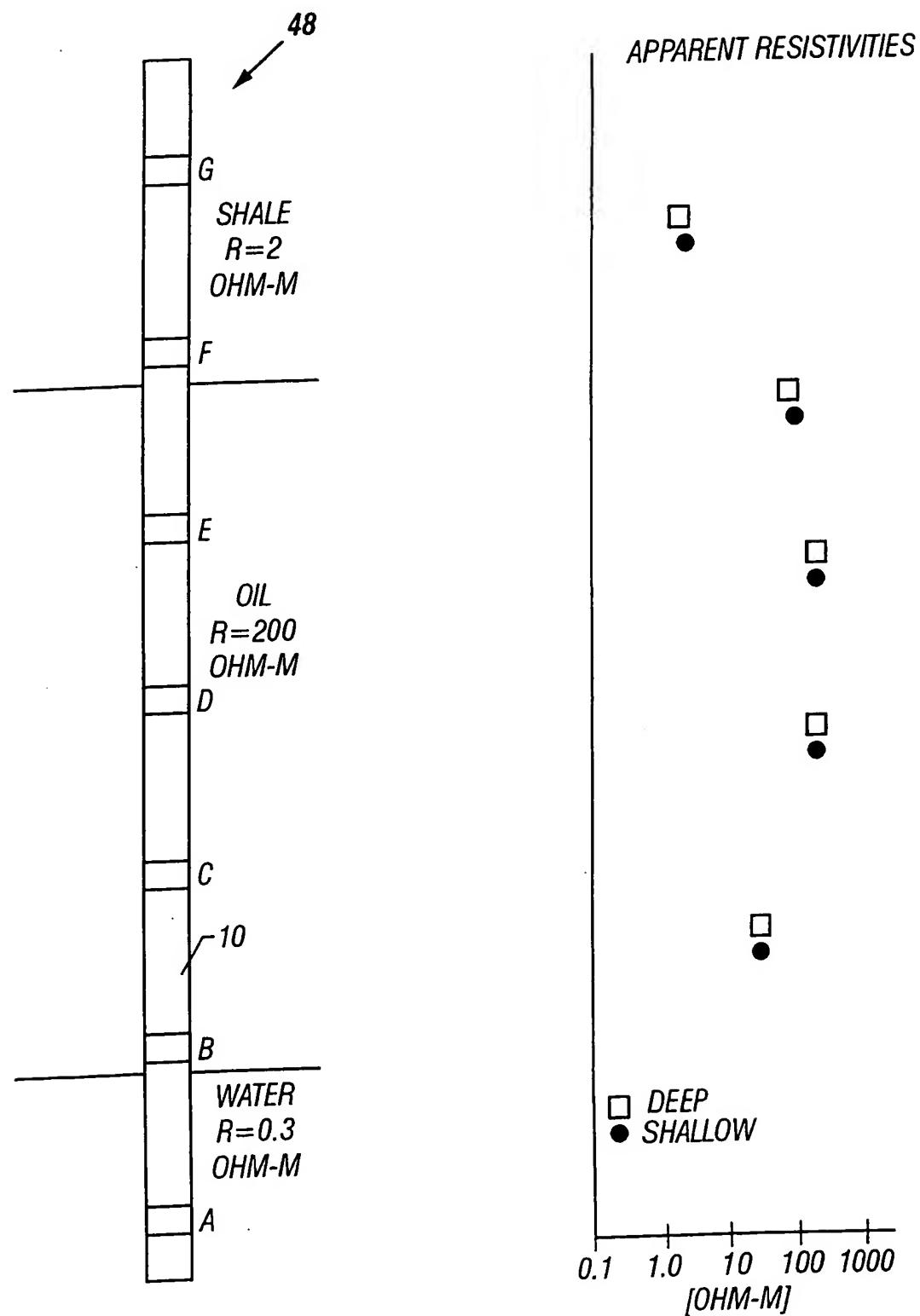
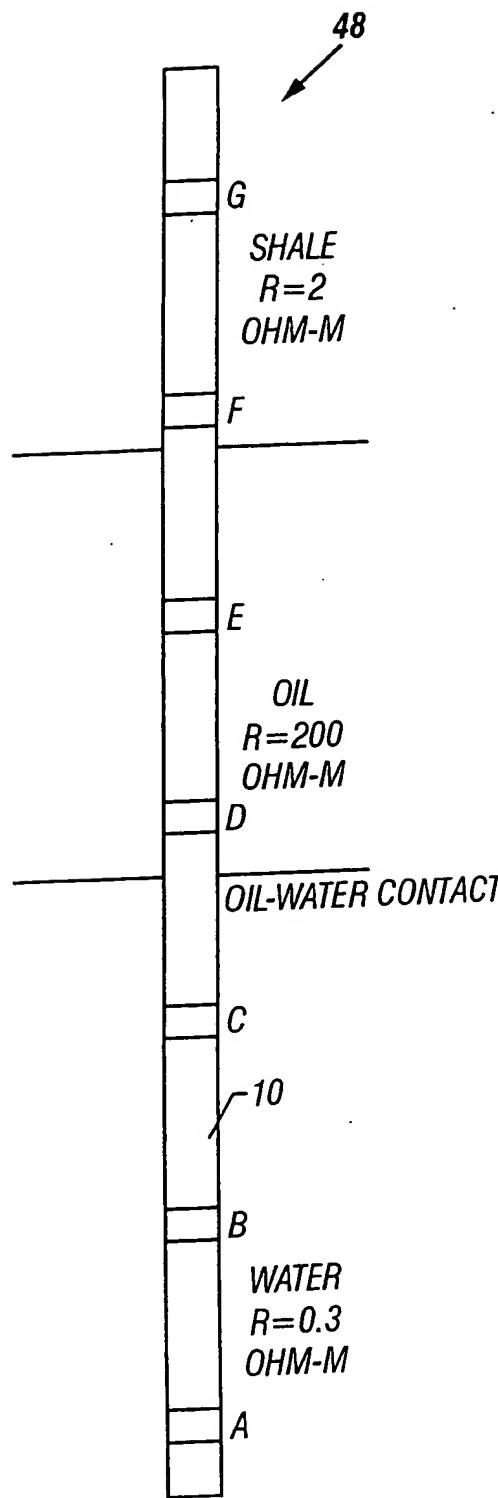


FIG. 20a



APPARENT RESISTIVITIES

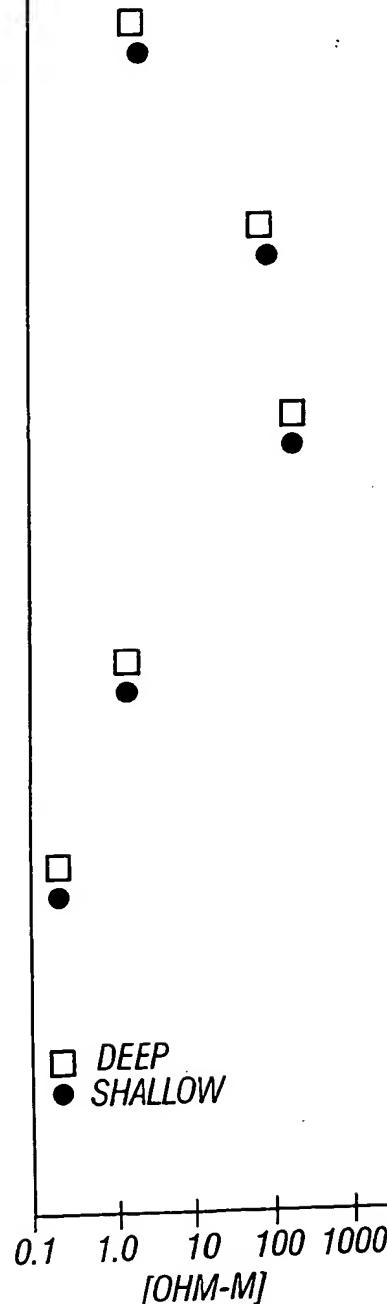


FIG. 20b

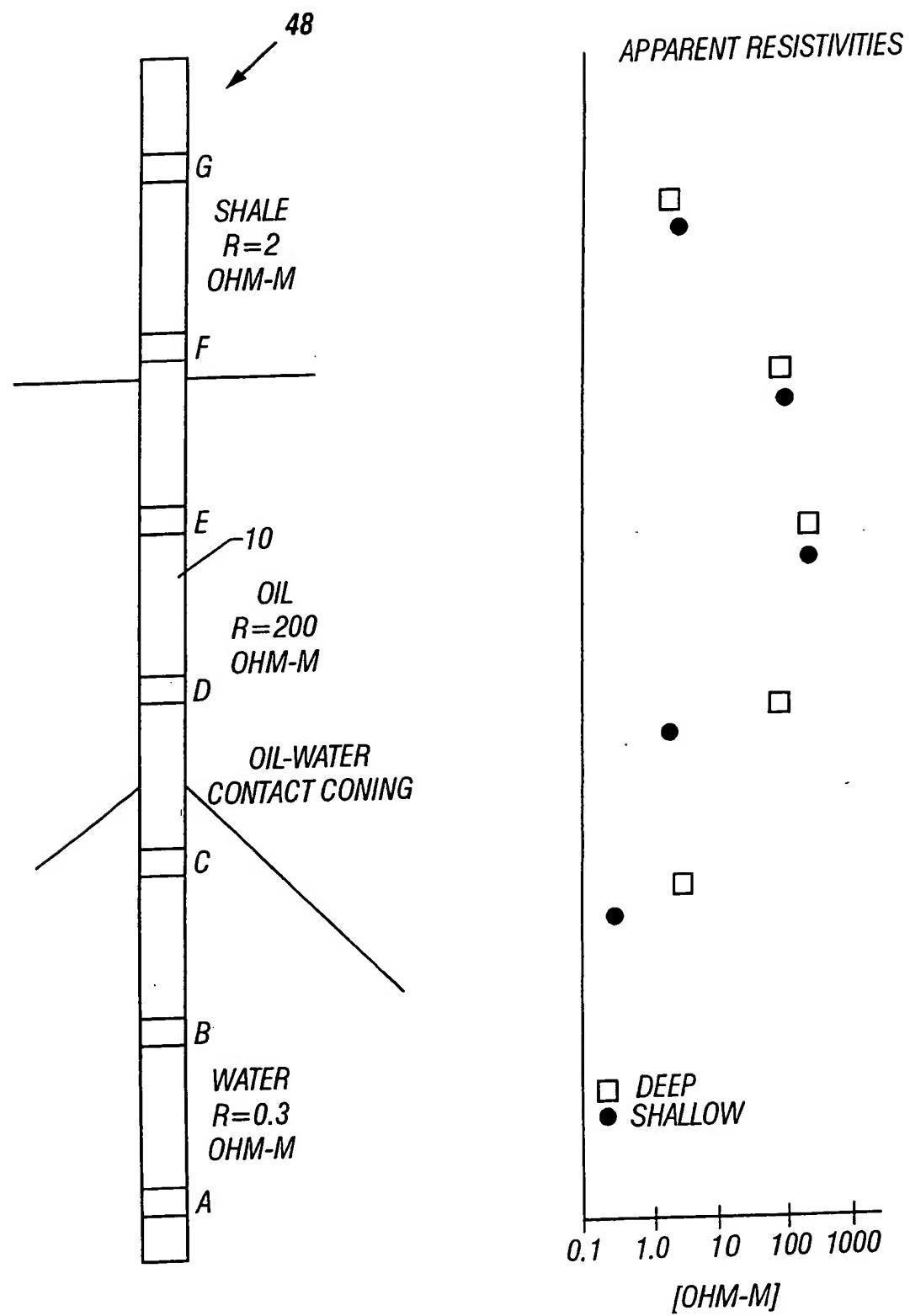
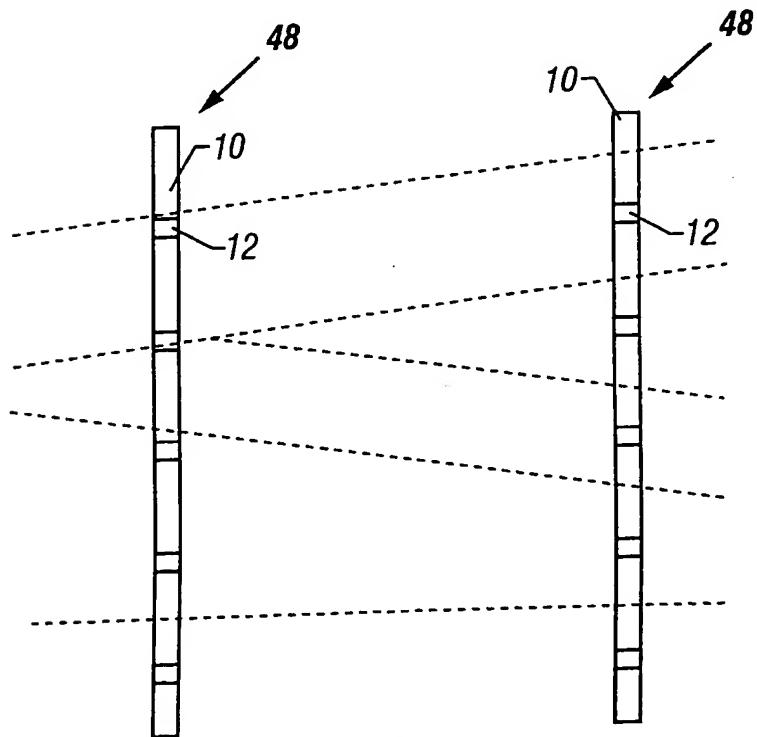
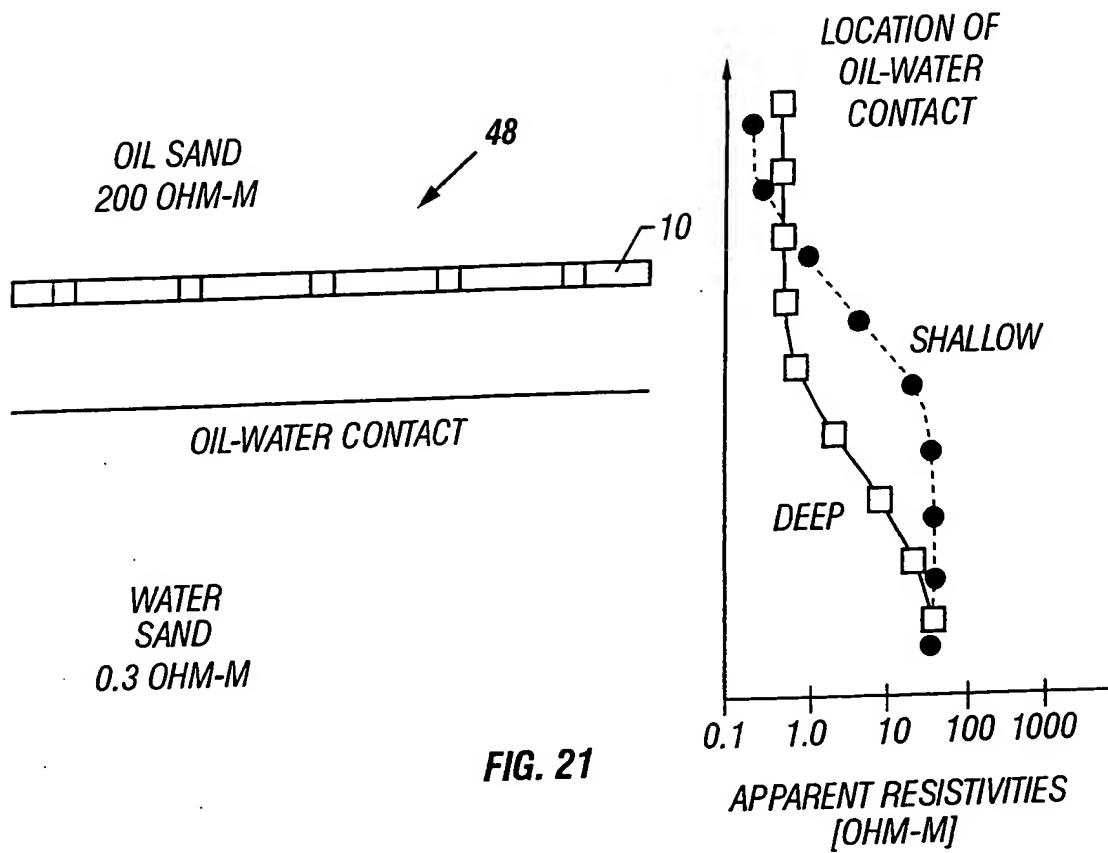


FIG. 20c



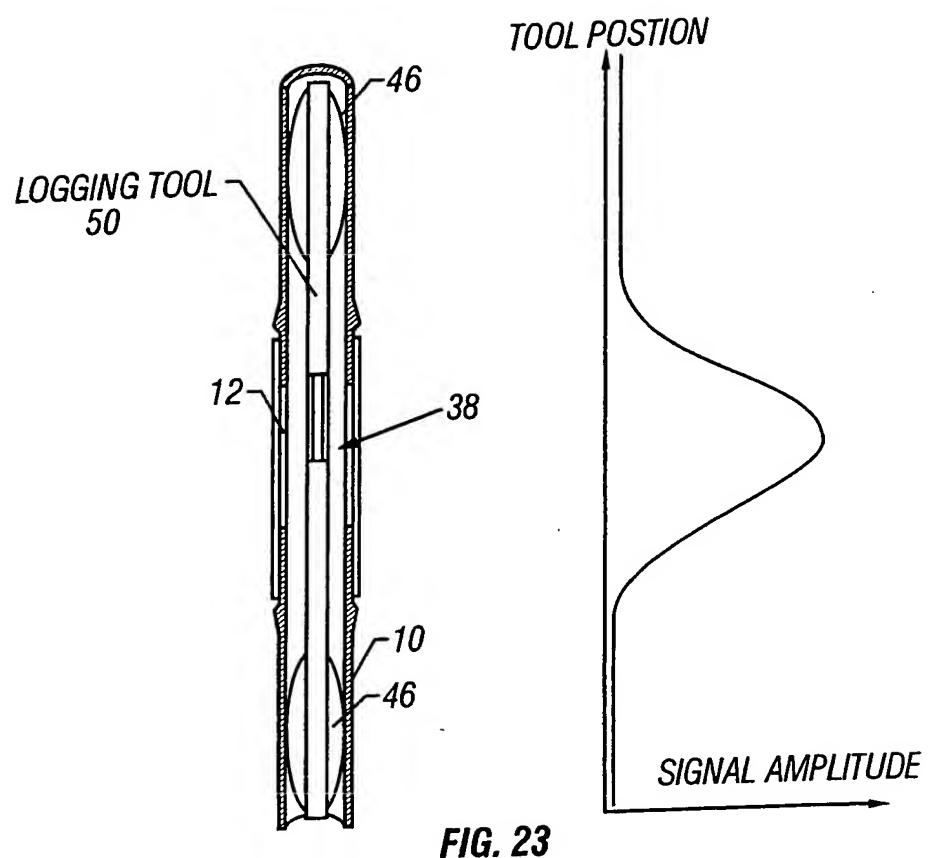


FIG. 23

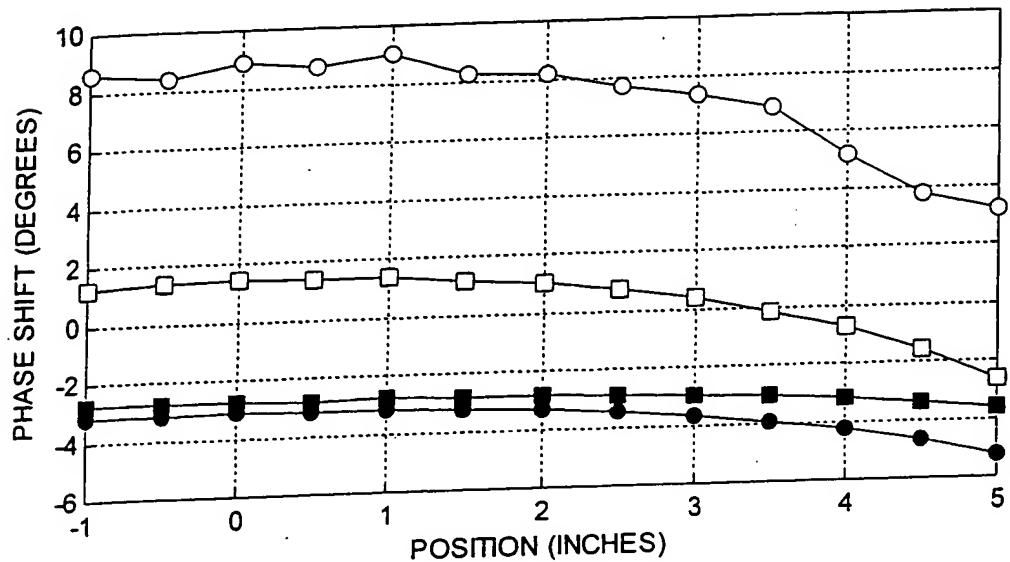
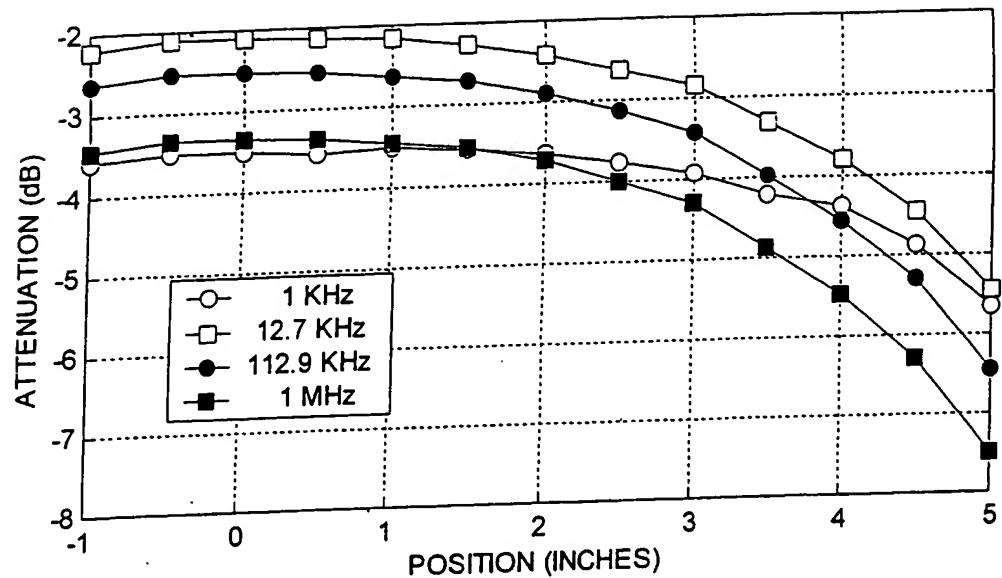


FIG. 24

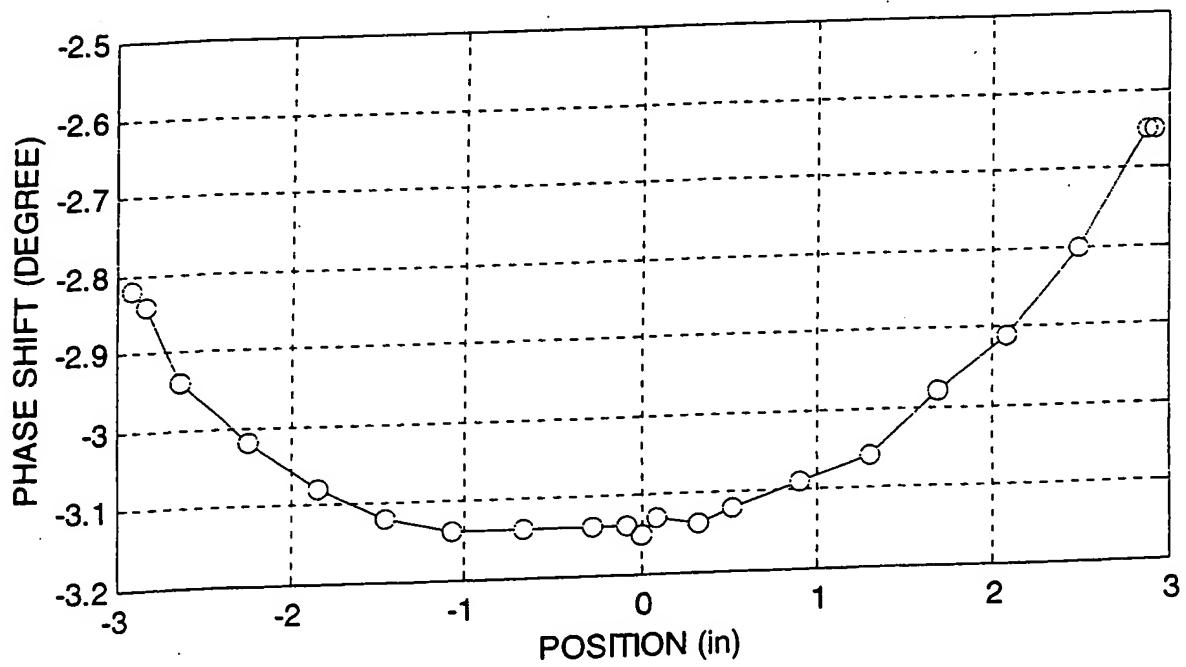
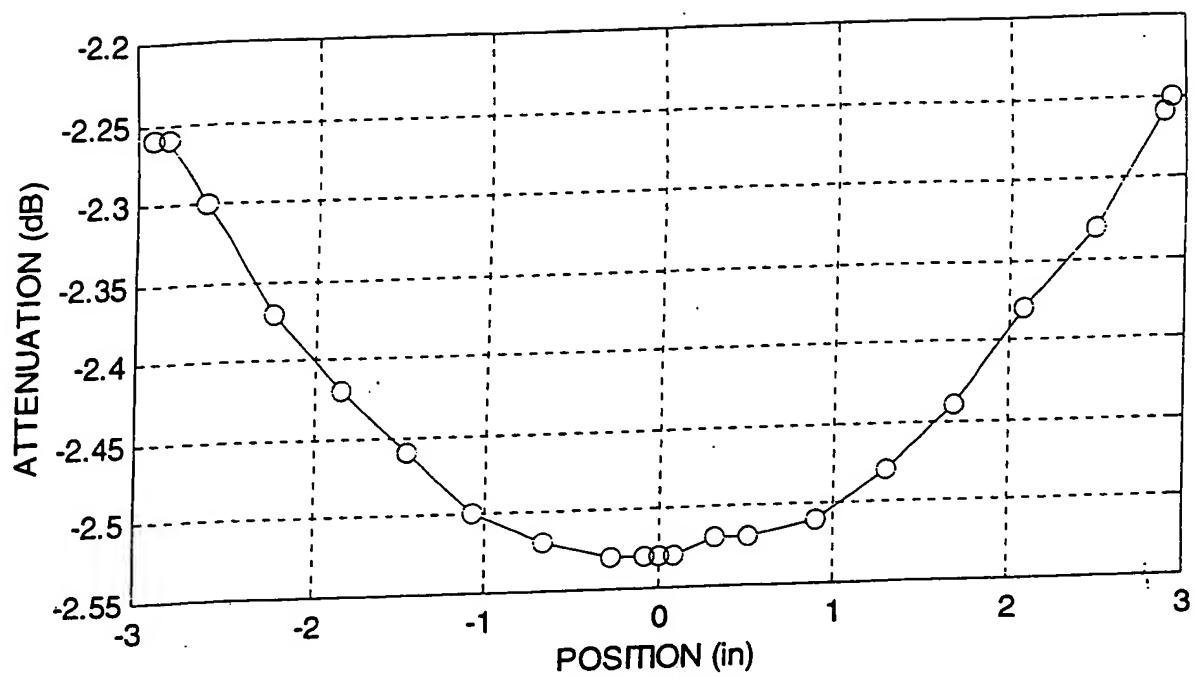


FIG. 25

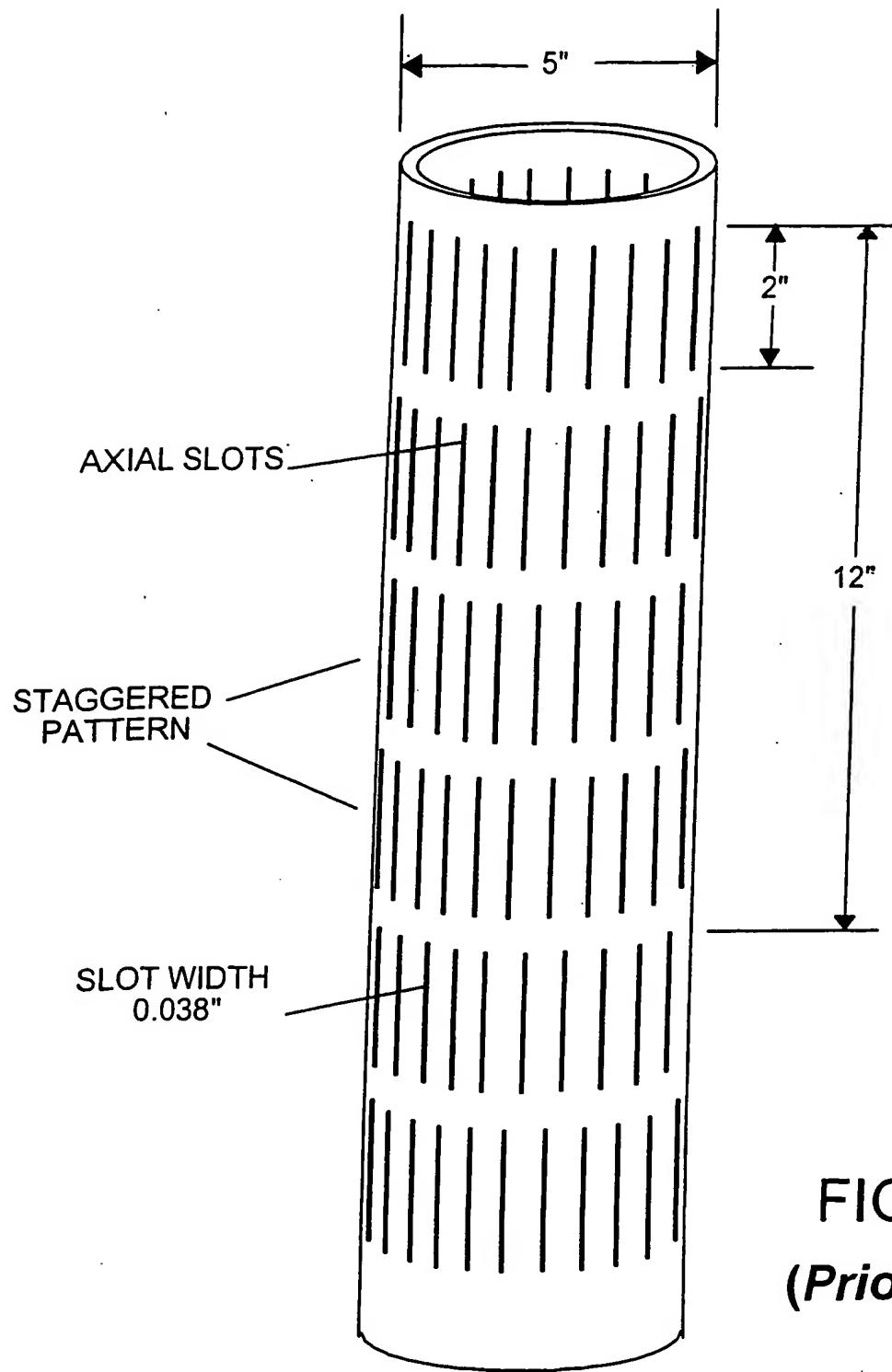


FIG. 26
(Prior Art)

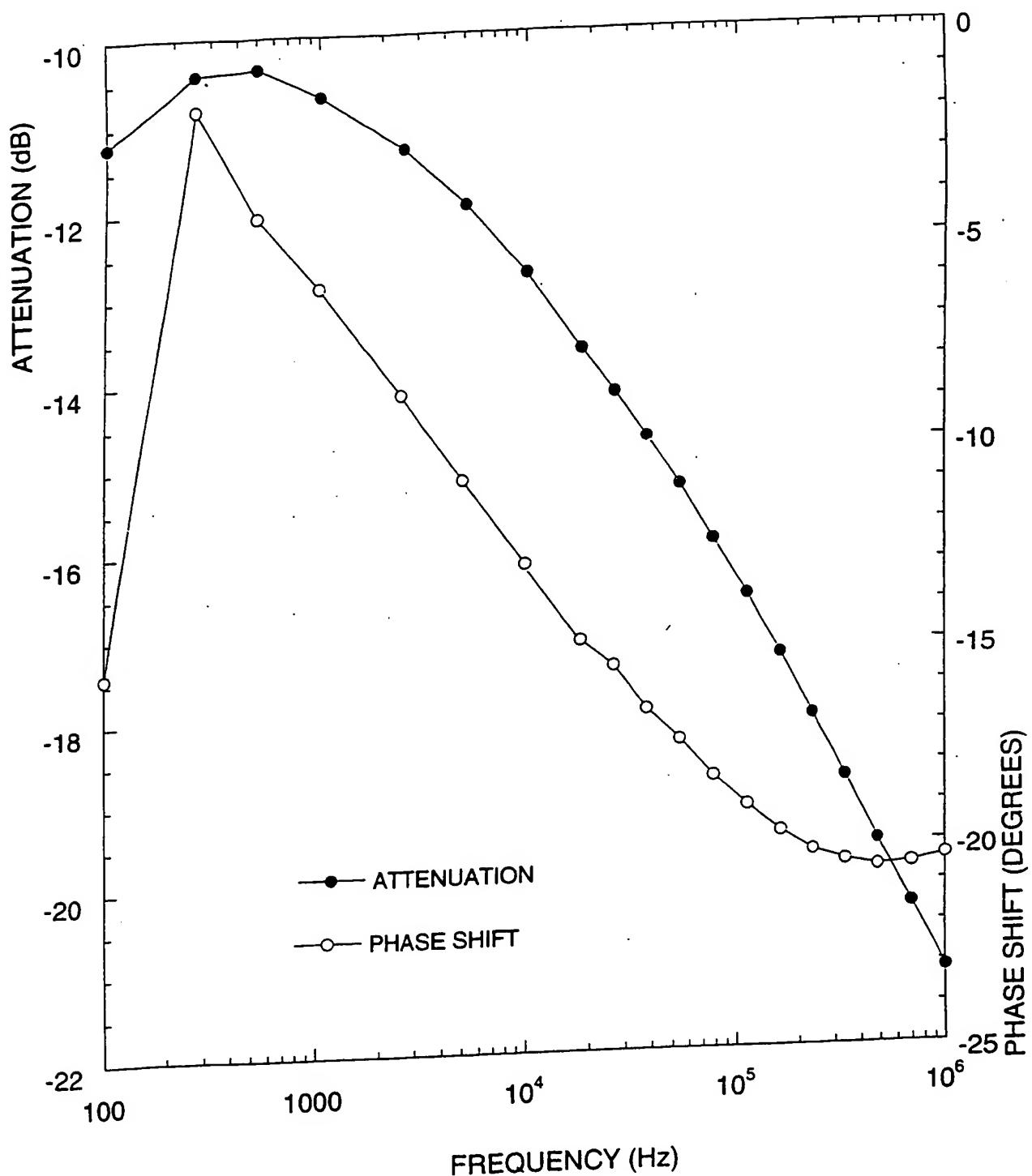


FIG. 27

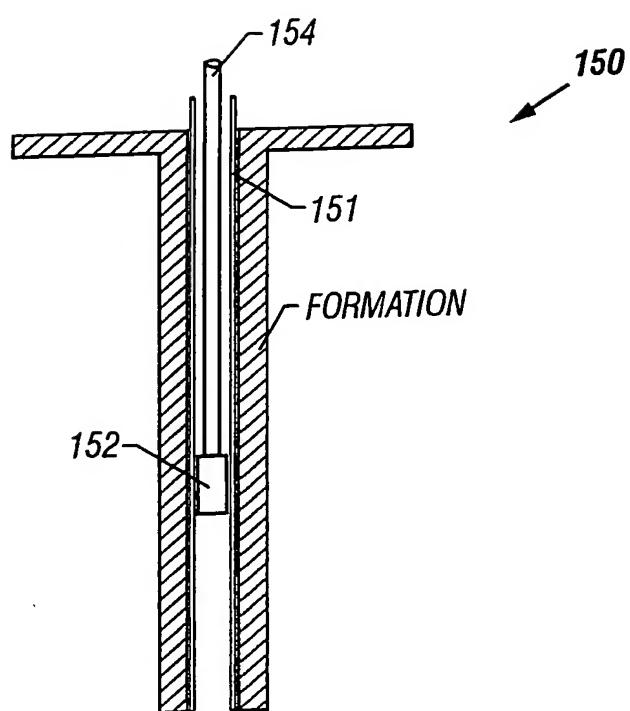


FIG. 28

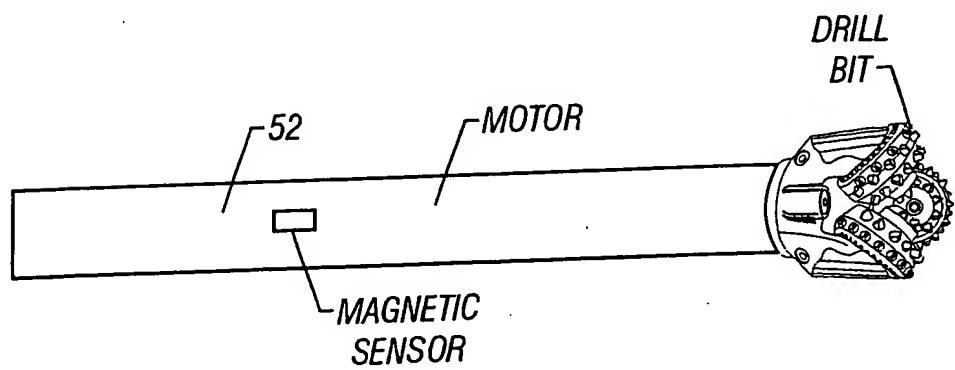
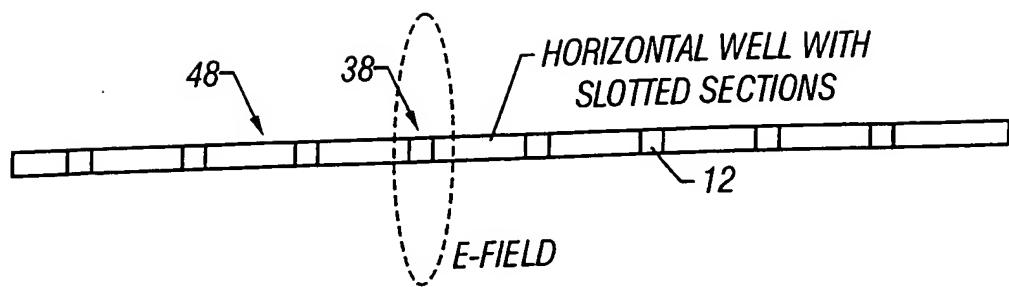


FIG. 29

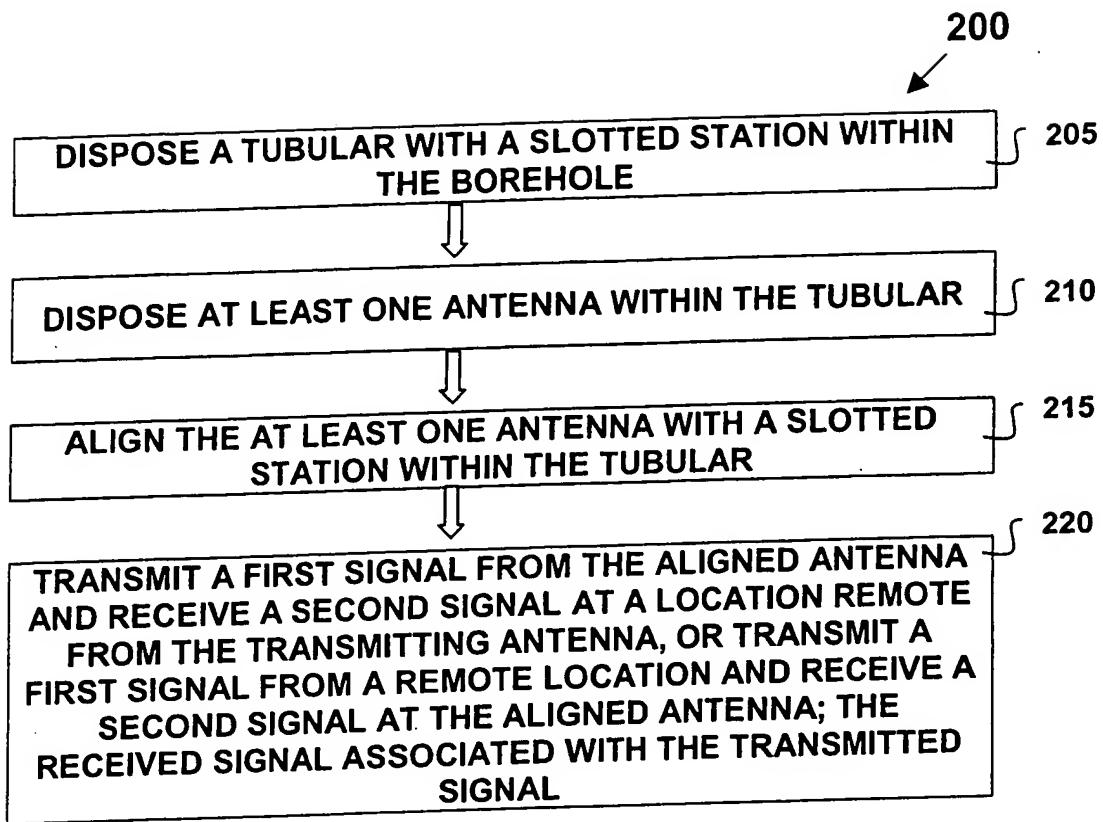


FIG. 30

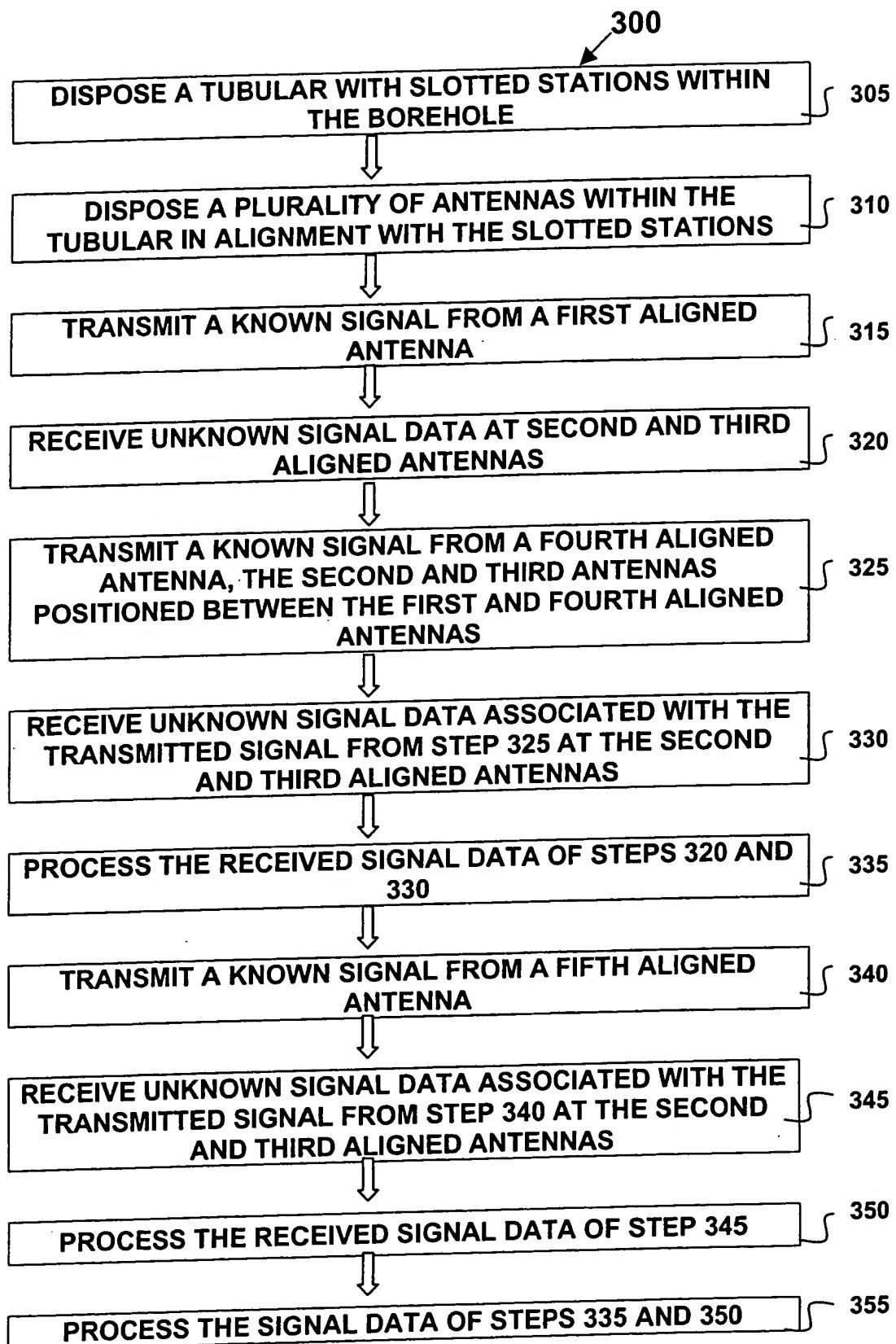


FIG. 31

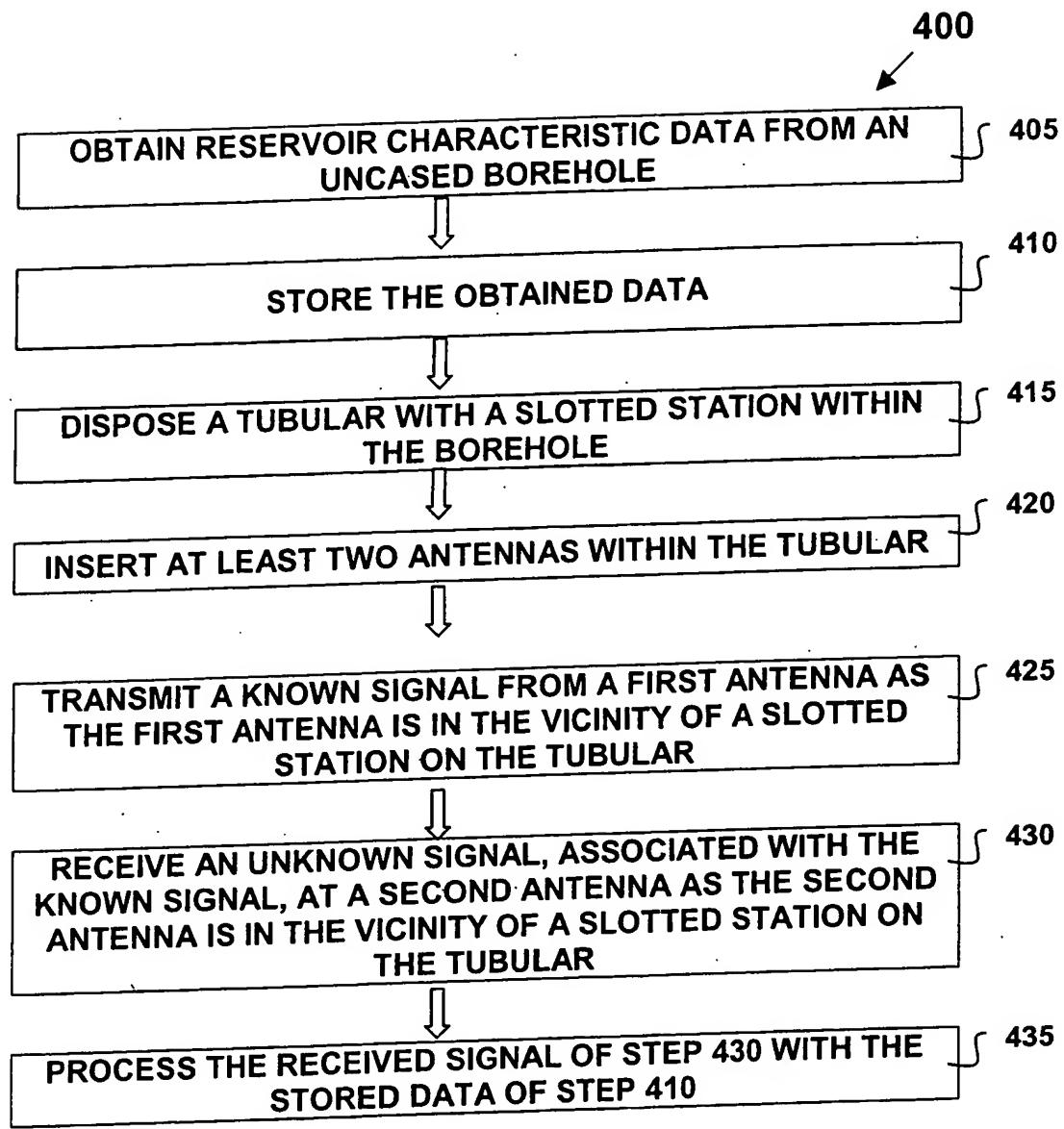


FIG. 32

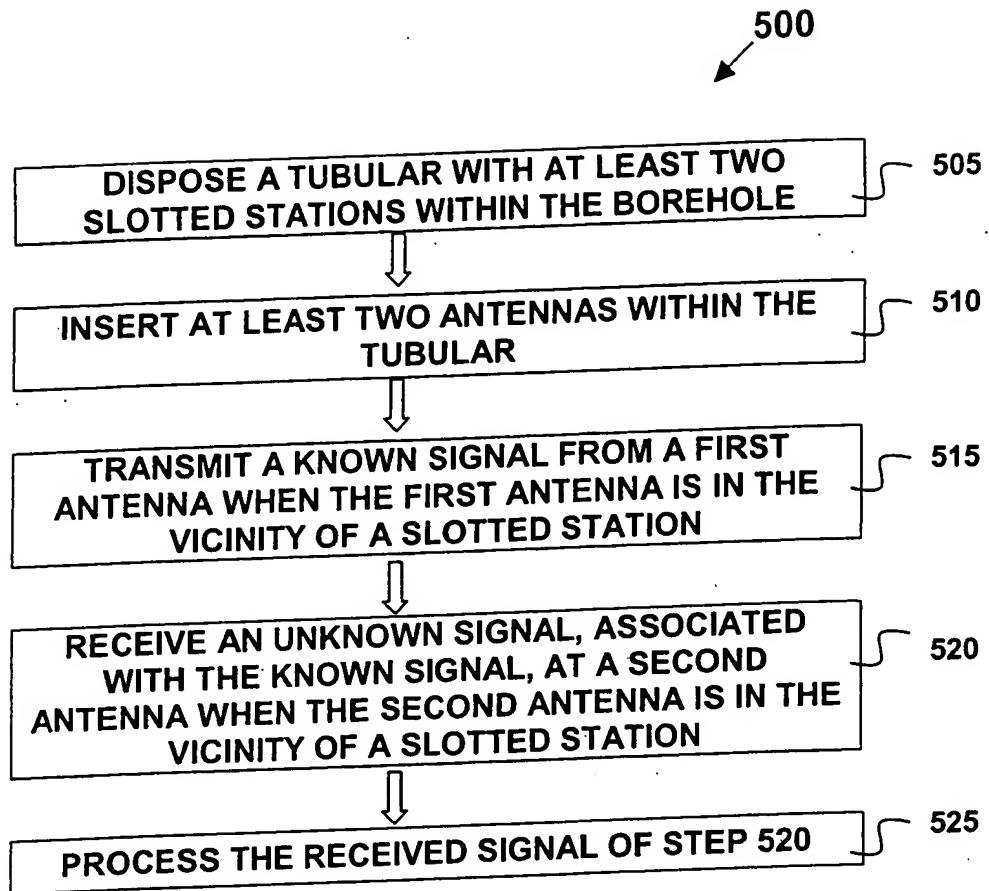


FIG. 33

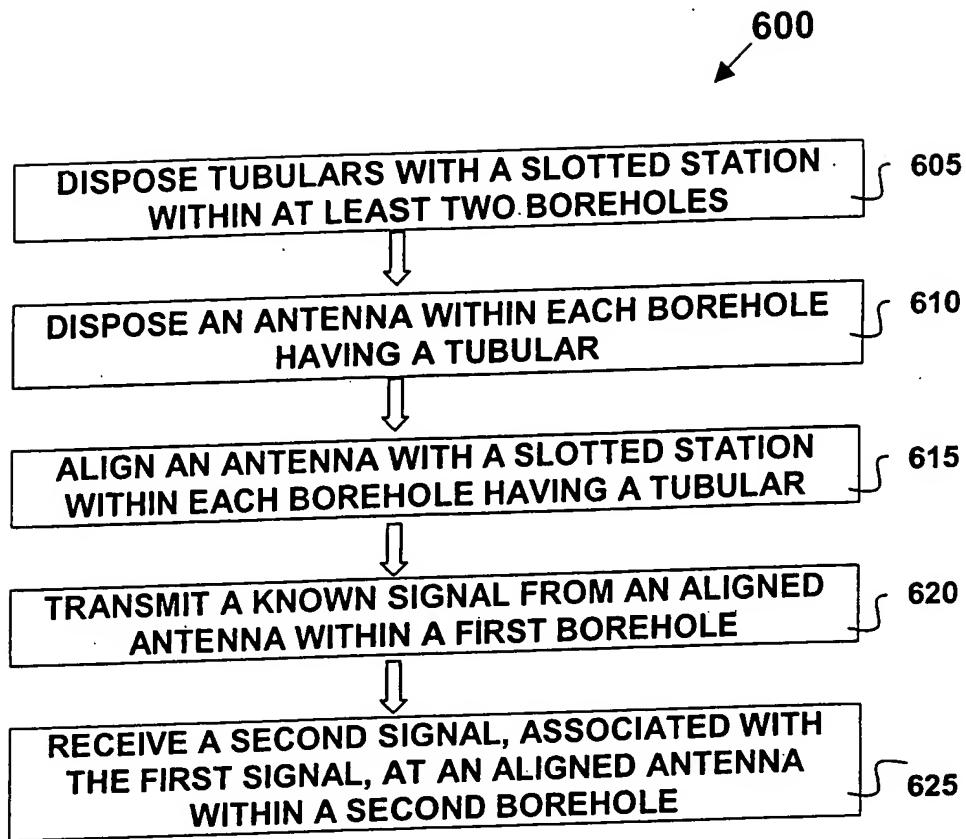
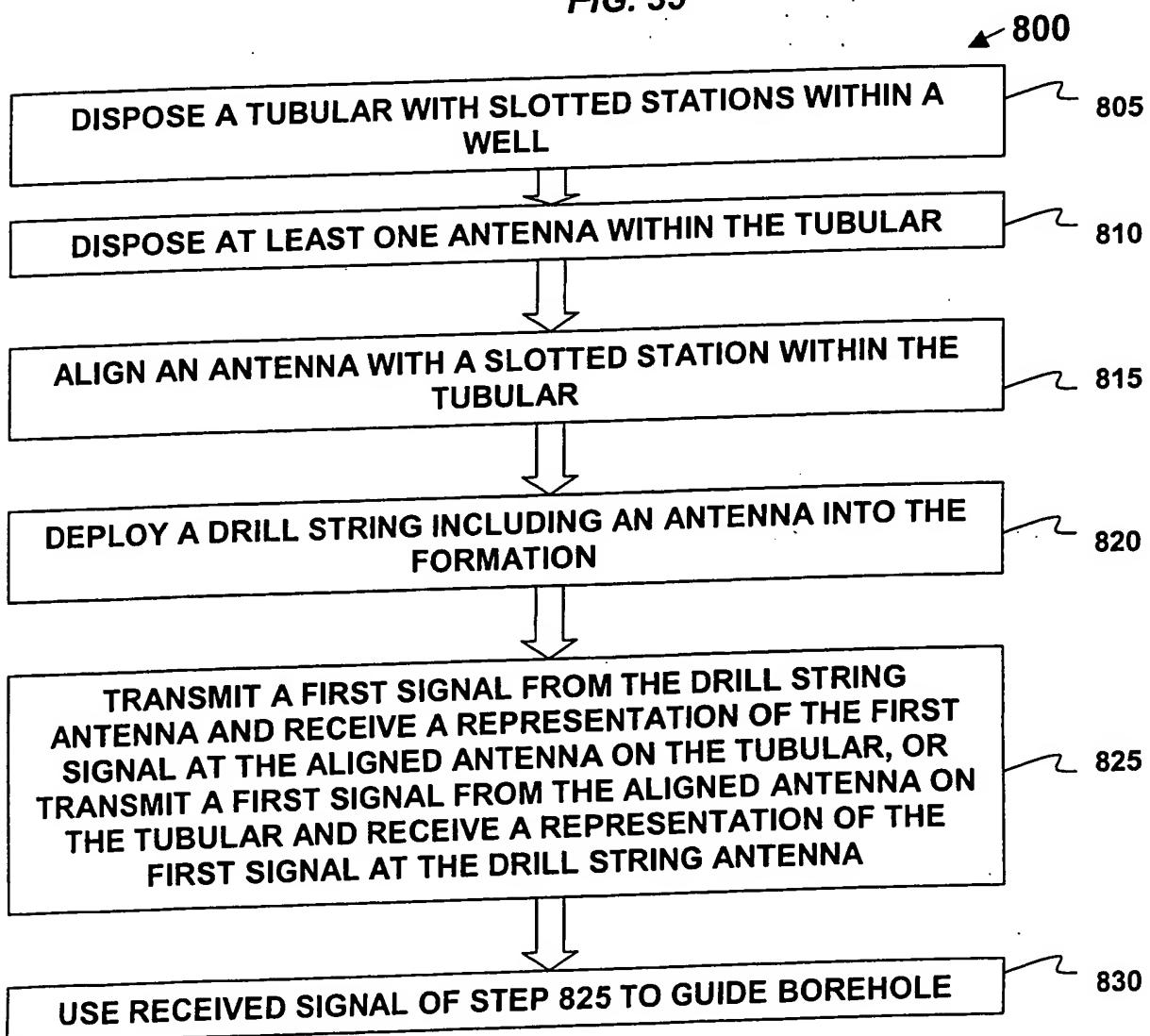
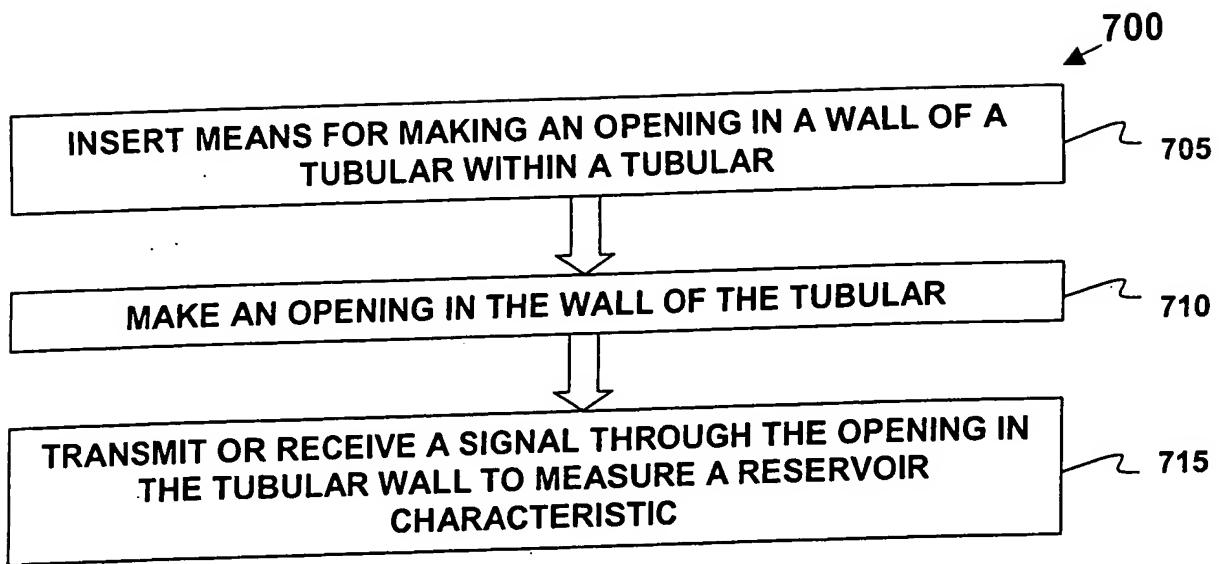


FIG. 34



900

DISPOSE A TUBULAR WITHIN THE BOREHOLE, THE
TUBULAR INCLUDING A SLOTTED STATION AND
MEANS TO HYDRAULICALLY ISOLATE THE
TUBULAR INTERIOR FROM A SURROUNDING
BOREHOLE AT THE SLOTTED STATION, THE
TUBULAR ADAPTED TO RECEIVE A SENSOR OR
ANTENNA FOR MONITORING A FORMATION
CHARACTERISTIC

FIG. 37

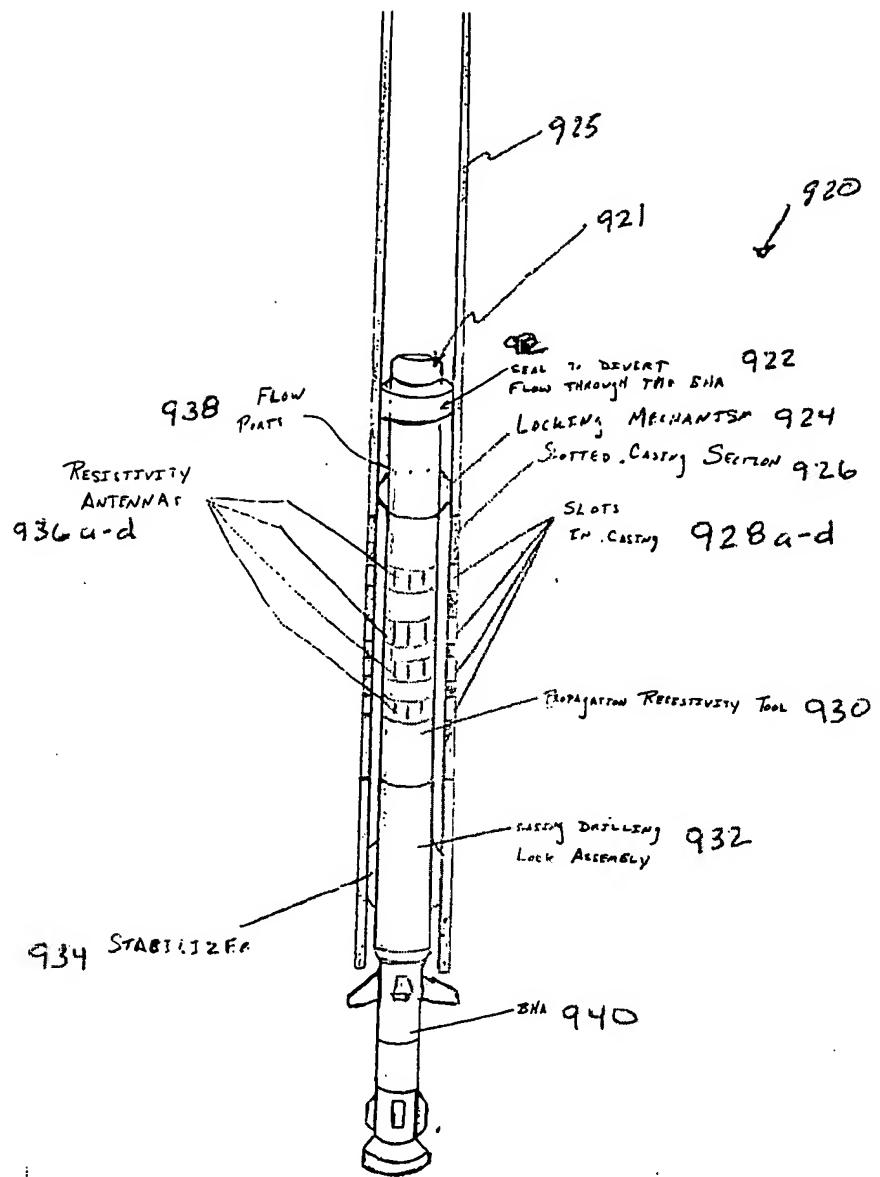


Figure 29a

BEST AVAILABLE COPY

DISPOSE A CASING TUBULAR HAVING A SLOTTED STATION WITHIN THE BOREHOLE

950

ALIGN IN LOCKING FASHION AN ANTENNA WITH THE SLOTTED STATION, THE ANTENNA PART OF A CASING DRILLING APPARATUS

952

COMMENCE A DRILLING OPERATION

954

TRANSMIT INTO THE FORMATION THROUGH ONE OF THE SLOTS A KNOWN SIGNAL FROM A FIRST ANTENNA

956

RECEIVE A SIGNAL, ASSOCIATED WITH THE KNOWN SIGNAL, AT A SECOND ANTENNA VIA ONE OF THE OTHER SLOTS

958

PROCESS THE RECEIVED SIGNAL OF STEP 950

960